CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.06/TBMK/WMM/Gradation/2014-15 08.09.2014

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

Agency : **Mr. T.B. Mahesh Kumar**, Contractor, Bangalore.

Name of Work : Improvements to Road and Drains at Chowrappa Layout in Ward No.06, BBMP, Bangalore.

Reference : AEE/BTP/WO/64/2014-15 Dated: 04.09.2014

Date of Testing : 08.09.2014

Material : WMM

Sample Location : WMM Mix Plant Oven Dry Wt (gm): **26300**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	985	985	3.7	96.3	95-100
22.4	6455	7440	28.3	71.7	60-80
11.2	6230	13670	52.0	48.0	40-60
4.75	4285	17955	68.3	31.7	25-40
2.36	3155	21110	80.3	19.7	15-30
0.600	2690	23800	90.5	9.5	8-22
0.075	2175	25975	98.8	1.2	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Civil Tech Consultants & Engineers Bangalore

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Job No.: CTCE/BBMP/W.No.06/TBMK/SDBC/Bitumen/2014-15 18.09.2014

BITUMEN CONTENT AND GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX AS PER IS2386 & IRC:SP:11-1984

CLIENT	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP,
AGENCY	**Mr. T.B. Mahesh Kumar,** Contractor, Bangalore.
NAME OF THE WORK	Improvements to Road and Drains at Chowrappa Layout in Ward No.06, BBMP, Bangalore.
REFERENCE	AEE/BTP/WO/64/2014-15 Dated: 04.09.2014
SAMPLE I/D	Road and Drains at Chowrappa Layout in Ward No.06
DATE OF TESTING	18.09.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	476	475.5
3. Weight of Asphalt and Mineral matter Extracted,	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	24	24.50
7. Bitumen content in %	4.80	4.90
8. Average	4.85	

GRADATION AFTER EXTRACTION

SIEVE SIZE	Trail 1				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	24.52	5.15	5.15	94.85	90-100
4.75	243.5	51.16	56.31	43.69	35-51
2.36	55.36	11.63	67.94	32.06	24-39
1.18	49.52	10.40	78.34	21.66	15-30
0.3	47.85	10.05	88.39	11.61	9-19
0.075	31.62	6.64	95.04	4.96	3-8

SIEVE SIZE	Trail 2				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	25.97	5.19	5.19	94.81	90-100
4.75	242.5	48.50	53.69	46.31	35-51
2.36	88.62	17.72	71.42	28.58	24-39
1.18	54.32	10.86	82.28	17.72	15-30
0.3	34.87	6.97	89.26	10.74	9-19
0.075	26.18	5.24	94.49	5.51	3-8

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